Davy Crockett Makes History with a Little Feller at the NTS

The Davy Crockett weapons system is mounted on a vehicle and prepared for launch.

Chairman of the Joint Chiefs of Staff General Maxwell Taylor (left), and the U.S. Attorney General Robert F. Kennedy (center) were on hand to witness the historic event.

Introduction

The desert temperature hovered at 90 degrees Fahrenheit the morning of July 17, 1962 at the Nevada Test Site (NTS), now known at the Nevada National Security Site (NNSS). Eventually the beating sun would increase the heat to over 105 degrees later that day, but at 10:00 a.m., a crowd of 396 spectators braved the scorching temperature and relentless sun to witness the last atmospheric test ever conducted by the United States. The crowd gathered in Area 18 of the NTS, approximately two miles from ground zero, where a Davy Crockett weapon system would soon launch the Little Feller I shot.

Davy Crockett

In 1962, Davy Crockett, hero of the Alamo, had been dead for 126 years. But on this hot summer morning, the name 'Davy Crockett' referred to the weapons system that fired projectiles from recoilless rifles with a firing range of 1.24 to 2.49 miles and could launch projectiles that weighed up to 79 pounds. Little Feller I, the fourth and last test of the Dominic II series (also known as Operation Sunbeam) conducted at the NTS, was a stockpile Davy Crockett tactical weapon with a nuclear warhead. Weighing only 51 pounds, Little Feller I was the smallest and lightest fission-type weapon deployed by the United States.

The objectives of the test were threefold:

1. Test the Davy Crockett weapons system in a simulated tactical situation
2. Train military personnel in the use of tactical nuclear weapons under simulated battlefield conditions
3. Obtain data on weapons effects characteristics from a low-yield nuclear detonation

Little Feller I

Little Feller I was planned and executed in just 70 days. Originally, three Little Feller shots were considered. The first shot was set for detonation just three feet above ground. The second and third shots were set to detonate at a height of 40 feet. As planning proceeded, shot three was cancelled and shot two became Little Feller I. It was set to detonate three feet above the ground and employ a military tactical maneuver.

Little Feller I (conducted after the Little Feller II test on July 7) consisted of a troop maneuver and an observer program. Little Feller I involved the largest number of military troops - more than 1,000 personnel from Fort Lewis, Washington - to ever participate in a nuclear test. The exercise was designed to test a nuclear weapons system under simulated tactical conditions.

At 6:00 a.m., the troops arrived at the exercise ground in Area 18 of the NTS and took their positions. From 7:00 to 8:00 a.m., the light and heavy squads practiced firing the Davy Crockett launchers to check and calibrate the range of weapon to the target. Scientific personnel then moved forward to check instrumentation in the target area.

Meanwhile, one L-20 aircraft flew an aerial survey mission to ensure that no unauthorized personnel were approaching the target area. By 8:47 a.m., all scientific personnel had left the shot area. Thirty minutes before the detonation, the Atomic Energy Commission started its countdown for Little Feller I. From 9:45 to 9:55 a.m., all personnel forward of the bleacher site entered previously prepared trenches, where they remained until after the detonation.

Five personnel from the maneuver task force launched the weapon from the Davy Crockett launcher mounted on an armored personnel carrier. Little Feller I detonated three feet above the surface on target, 2,796 feet from the firing position. After the initial radiation surveys were completed, the troops entered their vehicles and moved into the shot area, where they spent almost one hour conducting maneuvers.

The top of the cloud formed by Little Feller I reached 11,000 feet and moved north-northwest from the point of detonation.

Davy Crockett and Robert F. Kennedy

Observers in bleachers 2.17 miles southwest of ground zero wore protective goggles while they watched the detonation. Present in the crowd to witness the last U.S. atmospheric test was the Chairman of the Joint Chiefs of Staff General Maxwell Taylor, and the U.S. Attorney General Robert F. Kennedy. Kennedy's visit to the NTS preceded a visit from his brother, President John F. Kennedy, to the NTS Nuclear Rocket Development Station the following year.

Results

The tests in Operation Dominic II were designed to collect information on weapons effects, such as the electromagnetic pulse, prompt and residual radiation, and thermal radiation. The experiments also tested the effects of low-yield detonations on structures and on aircraft in flight. Military personnel at Little Feller I also participated in weapons effects tests, collecting data on blast, shock, and fallout effects, and in-air support activities, including cloud sampling and cloud tracking.

The end of an era

Almost one year after the Little Feller I test, in June 1963, President Kennedy announced that the United States, the Soviet Union, and the United Kingdom would take part in the Moscow Treaty or Partial Nuclear Test Ban Treaty. This treaty, which became effective on October 10, 1963, banned nuclear weapons tests in the atmosphere, in outer space, and underwater. The treaty did not prohibit underground nuclear testing, as long as the detonations did not cause radioactive debris to leave the territorial borders of the testing nation.

Long before the treaty took effect, the United States began nuclear testing underground. The first underground tests of nuclear explosives designed to be contained were the Pascal-A and Pascal-B tests, part of the Operation Plumbbob series conducted at the NTS in 1957. Operation Nougat (September 1961 - April 1962) was the first test series to be conducted entirely underground at the NTS.

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